

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

L Number	Hits	Search Text	DB	Time stamp
1	1477	700/79,108.ccls. or 370/216.ccls.	USPAT; US-PGPUB	2004/09/27 17:02
2	87	(700/79,108.ccls. or 370/216.ccls.) and bus and safety	USPAT; US-PGPUB	2004/09/27 17:03
3	16	((700/79,108.ccls. or 370/216.ccls.) and bus and safety) and programmable adj logic	USPAT; US-PGPUB	2004/09/27 17:05
4	117	bus same safety and programmable adj logic	USPAT; US-PGPUB	2004/09/27 17:05
5	5	(bus same safety and programmable adj logic) and subscriber	USPAT; US-PGPUB	2004/09/27 17:05
-	4	bus and safety and datastream and subscribers	USPAT; US-PGPUB	2004/03/30 13:43
-	28	700/108.ccls. and safety	USPAT; US-PGPUB	2003/07/11 16:47
-	8	(700/108.ccls. and safety) and bus	USPAT; US-PGPUB	2003/07/11 11:45
-	1	6028522.pn.	USPAT; US-PGPUB	2003/07/11 11:48
-	2282	sensor and actuator and bus and safety	USPAT; US-PGPUB	2003/07/11 11:48
-	228	(sensor and actuator and bus and safety) and 700/\$.ccls.	USPAT; US-PGPUB	2003/07/11 13:30
-	1	(sensor and actuator and bus and safety) and safety adj analyz\$3	USPAT; US-PGPUB	2003/07/11 11:50
-	17	((sensor and actuator and bus and safety) and 700/\$.ccls.) and subscrib\$3	USPAT; US-PGPUB	2003/07/11 11:52
-	63	(sensor and actuator and bus and safety) and crc	USPAT; US-PGPUB	2003/07/11 11:52
-	4	((sensor and actuator and bus and safety) and crc) and 700/\$.ccls.	USPAT; US-PGPUB	2003/07/11 13:34
-	27	700/\$.ccls. and bus and monitor same (data adj flow)	USPAT; US-PGPUB	2003/07/11 13:46
-	0	700/\$.ccls. and manipulats\$3 near4 datastream and (bus or network)	USPAT; US-PGPUB	2003/07/11 14:42
-	0	700/\$.ccls. and manipulats\$3 near4 datastream	USPAT; US-PGPUB	2003/07/11 14:42
-	3	700/\$.ccls. and manipulats\$3 near4 (data adj stream)	USPAT; US-PGPUB	2003/07/11 14:44
-	250	manipulat\$3 near4 (data adj stream)and (bus or network)	USPAT; US-PGPUB	2003/07/11 14:44
-	6	(manipulat\$3 near4 (data adj stream)and (bus or network)) and safety	USPAT; US-PGPUB	2003/07/11 14:46
-	1	4680753.pn.	USPAT; US-PGPUB	2003/07/11 14:51
-	532	downstream and subscriber and bus and (insert or edit) and data	USPAT; US-PGPUB	2003/07/11 14:53
-	73	(downstream and subscriber and bus and (insert or edit) and data) and safety	USPAT; US-PGPUB	2003/07/11 14:53
-	66	((downstream and subscriber and bus and (insert or edit)and data) and safety) and monitor	USPAT; US-PGPUB	2003/07/11 14:53
-	41	((((downstream and subscriber and bus and (insert or edit) and data) and safety) and monitor) and @ad<=19990617	USPAT; US-PGPUB	2003/07/11 17:00
-	2	de and "19815150"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/11 14:57
-	1	ep and "0770942"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/11 14:58
-	5	"0770942"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/11 14:59
-	1	de and "19540069"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/11 15:03

-	167	phoenix.as. and bus	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/11 15:03
-	16	(phoenix.as. and bus) and safety	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/11 15:03
-	1	"6111888".PN.	USPAT; US-PGPUB	2003/07/11 15:23
-	1	"6101566".PN.	USPAT; US-PGPUB	2003/07/11 15:23
-	1	"6098135".PN.	USPAT; US-PGPUB	2003/07/11 15:24
-	1	"6069926".PN.	USPAT; US-PGPUB	2003/07/11 15:27
-	1	"6061599".PN.	USPAT; US-PGPUB	2003/07/11 15:27
-	1	"6044305".PN.	USPAT; US-PGPUB	2003/07/11 15:27
-	1	"5966304".PN.	USPAT; US-PGPUB	2003/07/11 15:28
-	1	"5357625".PN.	USPAT; US-PGPUB	2003/07/11 15:28
-	1	"3717844".PN.	USPAT; US-PGPUB	2003/07/11 15:28
-	1	"4516122".PN.	USPAT; US-PGPUB	2003/07/11 16:21
-	6	fieldbus and monitor and safety and subscriber	USPAT; US-PGPUB	2003/07/11 16:29
-	3155	(bus or network) and monitor\$3 same safety and sensor	USPAT; US-PGPUB	2003/07/11 16:30
-	558	709/208-211.ccls.	USPAT; US-PGPUB	2003/07/11 16:31
-	2051	710/110,100,106,107.ccls.	USPAT; US-PGPUB	2003/07/11 16:31
-	339	709/208-211.ccls. and bus	USPAT; US-PGPUB	2003/07/11 16:31
-	19	(709/208-211.ccls. and bus) and safety	USPAT; US-PGPUB	2003/07/11 16:33
-	33	(709/208-211.ccls. and bus) and subscriber	USPAT; US-PGPUB	2003/07/11 16:33
-	3	((709/208-211.ccls. and bus) and subscriber) and sensor	USPAT; US-PGPUB	2003/07/11 16:35
-	46	(709/208-211.ccls. and bus) and sensor	USPAT; US-PGPUB	2003/07/11 16:35
-	37	((709/208-211.ccls. and bus) and sensor) and monitor\$3	USPAT; US-PGPUB	2003/07/11 16:35
-	26	((709/208-211.ccls. and bus) and sensor) and monitor\$3) and @ad<=19990617	USPAT; US-PGPUB	2003/07/14 11:11
-	866	710/110,100,106,107.ccls. and bus and monitor\$2	USPAT; US-PGPUB	2003/07/11 16:39
-	19	(710/110,100,106,107.ccls. and bus and monitor\$2) and safety	USPAT; US-PGPUB	2003/07/11 16:39
-	0	700/108.ccls	USPAT; US-PGPUB	2003/07/11 16:48
-	307	700/108.ccls.	USPAT; US-PGPUB	2003/07/11 16:48
-	178	700/108.ccls. and (bus or network)	USPAT; US-PGPUB	2003/07/11 16:48
-	138	(700/108.ccls. and (bus or network)) and monitor\$3	USPAT; US-PGPUB	2003/07/11 16:48
-	67	((700/108.ccls. and (bus or network)) and monitor\$3) and @ad<=19990617	USPAT; US-PGPUB	2003/07/14 11:31
-	880	bus and subscribers and data near2 manipulats4	USPAT; US-PGPUB	2003/07/14 11:10
-	664	(bus and subscribers and data near2 manipulats4) and monitor	USPAT; US-PGPUB	2003/07/14 11:11
-	293	((bus and subscribers and data near2 manipulats4) and monitor) and @ad<=19990617	USPAT; US-PGPUB	2003/07/14 11:12

-	204	((bus and subscribers and data near2 manipulat\$4) and monitor) and @ad<=19990617) and machine	USPAT; US-PGPUB	2003/07/14 11:12
-	165	((((bus and subscribers and data near2 manipulat\$4) and monitor) and @ad<=19990617) and machine) and (speed or temperature)	USPAT; US-PGPUB	2003/07/14 11:12
-	67	((700/108.ccls. and (bus or network)) and monitor\$3) and @ad<=19990617	USPAT; US-PGPUB	2003/07/14 14:26
-	649	700/79-80,177.ccls.	USPAT; US-PGPUB	2003/07/14 14:26
-	10	700/79-80,177.ccls. and bus and subscriber\$2	USPAT; US-PGPUB	2003/07/14 15:16
-	1	"6480473".PN.	USPAT; US-PGPUB	2003/07/14 14:59
-	1	"6424870".PN.	USPAT; US-PGPUB	2003/07/14 14:59
-	1	"6385562".PN.	USPAT; US-PGPUB	2003/07/14 15:00
-	1	"6381647".PN.	USPAT; US-PGPUB	2003/07/14 15:01
-	1	"6347252".PN.	USPAT; US-PGPUB	2003/07/14 15:01
-	1	"6307652".PN.	USPAT; US-PGPUB	2003/07/14 15:01
-	1	"6233704".PN.	USPAT; US-PGPUB	2003/07/14 15:13
-	1	"5566092".PN.	USPAT; US-PGPUB	2003/07/14 15:13
-	1	"5508689".PN.	USPAT; US-PGPUB	2003/07/14 15:13
-	1	"5369569".PN.	USPAT; US-PGPUB	2003/07/14 15:13
-	1	"4827477".PN.	USPAT; US-PGPUB	2003/07/14 15:14
-	167	700/79-80,177.ccls. and safety	USPAT; US-PGPUB	2003/07/14 15:16
-	57	roboter.as.	USPAT; US-PGPUB	2003/07/14 15:16
-	11	roboter.as. and safety	USPAT; US-PGPUB	2003/07/14 15:17
-	887	702/57-58,183.ccls.	USPAT; US-PGPUB	2003/07/14 15:18
-	118	702/57-58,183.ccls. and safety	USPAT; US-PGPUB	2003/07/14 15:18
-	4	(702/57-58,183.ccls. and safety) and bus and subscriber\$2	USPAT; US-PGPUB	2003/07/14 15:20
-	8	702/57-58,183.ccls. and bus and subscriber\$2	USPAT; US-PGPUB	2003/07/14 15:20
-	8	(702/57-58,183.ccls. and bus and subscriber\$2) notl25	USPAT; US-PGPUB	2003/07/14 15:20
-	4	(702/57-58,183.ccls. and bus and subscriber\$2) not ((702/57-58,183.ccls. and safety) and bus and subscriber\$2)	USPAT; US-PGPUB	2003/07/14 15:20
-	14	(US-6437692-\$ or US-5984504-\$ or US-6181975-\$ or US-5208742-\$ or US-5161110-\$ or US-4680753-\$ or US-6347252-\$ or US-5442639-\$ or US-4149241-\$ or US-6115643-\$ or US-6577918-\$ or US-6385562-\$).did. or (DE-19815150-\$).did. or (EP-770942-\$).did.	USPAT; EPO; DERWENT	2003/07/15 15:47
-	2	((US-6437692-\$ or US-5984504-\$ or US-6181975-\$ or US-5208742-\$ or US-5161110-\$ or US-4680753-\$ or US-6347252-\$ or US-5442639-\$ or US-4149241-\$ or US-6115643-\$ or US-6577918-\$ or US-6385562-\$).did. or (DE-19815150-\$).did. or (EP-770942-\$).did.) and subscribe\$2 and bus	USPAT; US-PGPUB	2003/07/14 17:23

-	11	safety.ti. and bus and subscriber\$2	USPAT; US-PGPUB	2003/07/14 17:23
-	28	(US-6437692-\$ or US-5984504-\$ or US-6181975-\$ or US-5208742-\$ or US-5161110-\$ or US-4680753-\$ or US-6347252-\$ or US-5442639-\$ or US-4149241-\$ or US-6115643-\$ or US-6577918-\$ or US-6385562-\$).did. or (DE-19815150-\$).did. or (EP-770942-\$).did.	USPAT; EPO; DERWENT	2003/07/15 15:47
-	2	((US-6437692-\$ or US-5984504-\$ or US-6181975-\$ or US-5208742-\$ or US-5161110-\$ or US-4680753-\$ or US-6347252-\$ or US-5442639-\$ or US-4149241-\$ or US-6115643-\$ or US-6577918-\$ or US-6385562-\$).did. or (DE-19815150-\$).did. or (EP-770942-\$).did.) and crc	USPAT; EPO; DERWENT	2003/07/15 16:20
-	5	((US-6437692-\$ or US-5984504-\$ or US-6181975-\$ or US-5208742-\$ or US-5161110-\$ or US-4680753-\$ or US-6347252-\$ or US-5442639-\$ or US-4149241-\$ or US-6115643-\$ or US-6577918-\$ or US-6385562-\$).did. or (DE-19815150-\$).did. or (EP-770942-\$).did.) and master and slave	USPAT; EPO; DERWENT	2003/07/15 16:21
-	5	bus and (safety or hazard) and datastream and subscribers	USPAT; US-PGPUB	2004/03/22 16:26
-	7	safety adj analyzer	USPAT; US-PGPUB	2004/03/22 16:27
-	0	quadtech.as.	USPAT; US-PGPUB	2004/03/22 16:28
-	119	safety and sensor and machine and tool and subscriber	USPAT; US-PGPUB	2004/03/22 16:29
-	92	(safety and sensor and machine and tool and subscriber) and bus	USPAT; US-PGPUB	2004/03/22 16:29
-	92	((safety and sensor and machine and tool and subscriber) and bus) and data	USPAT; US-PGPUB	2004/03/22 16:40
-	1	6325198.pn.	USPAT; US-PGPUB	2004/03/22 16:40
-	1	6325198.pn. and safety adj monitor	USPAT; US-PGPUB	2004/03/24 11:29
-	202	safety adj monitor	USPAT; US-PGPUB	2004/03/22 16:41
-	2	(safety adj monitor) and subscriber	USPAT; US-PGPUB	2004/03/22 16:41
-	57	(safety adj monitor) and bus	USPAT; US-PGPUB	2004/03/22 16:48
-	1041	schneider.as.	USPAT; US-PGPUB	2004/03/22 16:48
-	141	schneider.as. and safety	USPAT; US-PGPUB	2004/03/22 16:48
-	12	(schneider.as. and safety) and bus	USPAT; US-PGPUB	2004/03/22 16:58
-	7	("4257103" "4689541" "4931712" "4962338" "5212430" "5237250" "5293102").PN.	USPAT	2004/03/22 16:50
-	2	5955859.URPN.	USPAT	2004/03/22 16:50
-	8	5063527.URPN.	USPAT	2004/03/22 16:56
-	29	("3701113" "3829842" "3978454" "4075707" "4095094" "4101258" "4107649" "4117317" "4275464" "4276603" "4412280" "4414669" "4488300" "4507784" "4511975" "4520482" "4558416" "4567556" "4633384" "4636949" "4644479" "4649469" "4670876" "4740888" "4745542" "4749992" "4827397" "4852046" "4931975").PN.	USPAT	2004/03/22 16:57
-	53	(safety adj monitor) and active	USPAT; US-PGPUB	2004/03/22 16:58
-	8	5063527.URPN.	USPAT	2004/03/22 16:59

-	10	("3717844" "5357625" "5966304" "6044305" "6061599" "6069926" "6076952" "6098135" "6101566" "6111888").PN.	USPAT	2004/03/23 15:22
-	9	6347252.URPN.	USPAT	2004/03/23 15:23
-	135	safety and fieldbus and monitor	USPAT; US-PGPUB	2004/03/23 15:26
-	0	(safety and fieldbus and monitor) and safety adj monitor	USPAT; US-PGPUB	2004/03/23 15:39
-	0	(safety and fieldbus and monitor) and on and off	USPAT; US-PGPUB	2004/03/23 15:40
-	97	(safety and fieldbus and monitor) and actuator	USPAT; US-PGPUB	2004/03/23 17:16
-	1	6325198.pn. and safety and safety adj monitor	USPAT; US-PGPUB	2004/03/23 17:16
-	1	6325198.pn. and safety	USPAT; US-PGPUB	2004/03/25 10:34
-	4033913	ep "837394"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 10:34
-	3	ep and "837394"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 10:55
-	0	837394.URPN.	USPAT	2004/03/25 10:37
-	10	5204865.pn. or 5448723.pn. or 5473599.pn. or 5784547.pn. or 5928368.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 14:55
-	0	732654.URPN.	USPAT	2004/03/25 10:59
-	2	de and "19815150"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 15:06
-	2	(light adj barrier and bus and controller) and poll\$4 and sensor	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 15:06
-	75	light adj barrier and bus and controller	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 15:10
-	27	bus adj subscriber and safety	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 17:24
-	2	6347252.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 15:13
-	876	bus and subscriber and safety	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 16:55
-	629	(bus and subscriber and safety) and monitor	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 16:55
-	266	((bus and subscriber and safety) and monitor) and emergency	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 16:56
-	158	((bus and subscriber and safety) and monitor) and emergency) and sensor	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 16:56

-	27	(US-6437692-\$ or US-5984504-\$ or US-6181975-\$ or US-5208742-\$ or US-5161110-\$ or US-4680753-\$ or US-6347252-\$ or US-5442639-\$ or US-4149241-\$ or US-6115643-\$ or US-6577918-\$ or US-6385562-\$ or US-6615091-\$ or US-6325198-\$ or US-5063527-\$ or US-6601005-\$ or US-5204865-\$ or US-6466539-\$ or US-6115831-\$).did. or (US-20020093951-\$ or US-20040008467-\$ or US-20040010651-\$ or US-20010049564-\$).did. or (DE-19815150-\$).did. or (EP-770942-\$ or EP-837394-\$ or EP-732654-\$).did.	USPAT; US-PGPUB; EPO; DERWENT	2004/03/25 17:14
-	153	((((bus and subscriber and safety) and monitor) and emergency) and sensor) not ((US-6437692-\$ or US-5984504-\$ or US-6181975-\$ or US-5208742-\$ or US-5161110-\$ or US-4680753-\$ or US-6347252-\$ or US-5442639-\$ or US-4149241-\$ or US-6115643-\$ or US-6577918-\$ or US-6385562-\$ or US-6615091-\$ or US-6325198-\$ or US-5063527-\$ or US-6601005-\$ or US-5204865-\$ or US-6466539-\$ or US-6115831-\$).did. or (US-20020093951-\$ or US-20040008467-\$ or US-20040010651-\$ or US-20010049564-\$).did. or (DE-19815150-\$).did. or (EP-770942-\$ or EP-837394-\$ or EP-732654-\$).did.)	USPAT; US-PGPUB	2004/03/25 17:16
-	2	((((bus and subscriber and safety) and monitor) and emergency) and sensor) and fieldbus	USPAT; US-PGPUB	2004/03/25 17:23
-	494	370/216.ccls.	USPAT; US-PGPUB	2004/03/25 17:23
-	19	370/216.ccls. and safety	USPAT; US-PGPUB	2004/03/25 17:23
-	300	bus adj subscriber	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 17:24
-	300	bus adj subscriber\$1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 17:24
-	28	(bus adj subscriber\$1) and emergency	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 17:24
-	18	((bus adj subscriber\$1) and emergency) and monitor\$1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/25 17:24
-	20	operator adj protection and plant	USPAT; US-PGPUB	2004/03/29 17:42
-	4	(operator adj protection and plant) and (bus or network)	USPAT; US-PGPUB	2004/03/29 17:42
-	20	(operator adj protection and plant) not12	USPAT; US-PGPUB	2004/03/29 17:42
-	16	(operator adj protection and plant) not ((operator adj protection and plant) and (bus or network))	USPAT; US-PGPUB	2004/03/29 17:42
-	14	operator adj protection and bus	USPAT; US-PGPUB	2004/03/29 17:43
-	2186	operator and safety and network and plant	USPAT; US-PGPUB	2004/03/29 17:44
-	100	operator and safety and fieldbus	USPAT; US-PGPUB	2004/03/29 17:53
-	69	(operator and safety and fieldbus) and actuator	USPAT; US-PGPUB	2004/03/29 17:45

-	37	((operator and safety and fieldbus) and actuator) and serial	USPAT; US-PGPUB	2004/03/29 17:45
-	7	("5136498" "5142470" "5245616" "5255388" "5379278" "5910778" "6351829").PN.	USPAT	2004/03/29 17:49
-	0	6701198.URPN.	USPAT	2004/03/29 17:49
-	153	fieldbus and safety and monitor\$3	USPAT; US-PGPUB	2004/03/29 18:10
-	121	(fieldbus and safety and monitor\$3) not (((operator and safety and fieldbus) and actuator) and serial)	USPAT; US-PGPUB	2004/03/29 17:54
-	48	5442639.URPN.	USPAT	2004/03/29 18:07
-	79	fieldbus and ((monitor\$3 or analyz\$3) same safety)	USPAT; US-PGPUB	2004/03/29 18:10
-	79	fieldbus and ((monitor\$3) same safety)	USPAT; US-PGPUB	2004/03/29 18:10
-	0	(fieldbus and ((monitor\$3) same safety)) not (fieldbus and safety and monitor\$3)	USPAT; US-PGPUB	2004/03/29 18:10
-	1	6466539.pn.	USPAT; US-PGPUB	2004/03/30 16:45
-	1	6611722.pn.	USPAT; US-PGPUB	2004/03/30 16:52
-	1	6347252.pn.	USPAT; US-PGPUB	2004/03/30 16:46
-	1431	714/47,48,56.ccls.	USPAT; US-PGPUB	2004/03/30 16:52
-	52	714/47,48,56.ccls. and safety and bus	USPAT; US-PGPUB	2004/03/30 16:52
-	4	(714/47,48,56.ccls. and safety and bus) and subscriber	USPAT; US-PGPUB	2004/03/30 16:52